

1
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<110> Gentz, Reiner
<120> Tumor Necrosis Factor Receptors 6 Alpha and 6 Beta
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Ser Leu Leu Cys Leu Val Leu Ala Leu Pro Ala Leu Leu Pro Val Pro	
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gct gta cgc gga gtg gca gaa aca ccc acc tac ccc tgg cgg gac gca	147
Ala Val Arg Gly Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala	
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gag aca ggg gag cgg ctg gtg tgc gcc cag tgc ccc cca ggc acc ttt	195
Glu Thr Gly Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe	
45 50 55	
gtg cag cgg ccg tgc cgc cga gac agc ccc acg acg tgt ggc ccg tgt	243
Val Gln Arg Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys	
60 65 70	
cca ccg cgc cac tac acg cag ttc tgg aac tac ctg gag cgc tgc cgc	291
Pro Pro Arg His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg	
75 80 85	
tac tgc aac gtc ctc tgc ggg gag cgt gag gag gag gca cgg gct tgc	339
Tyr Cys Asn Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys	
90 95 100 105	
cac gcc acc cac aac cgt gcc tgc cgc tgc cgc acc ggc ttc ttc gcg	387
His Ala Thr His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala	
110 115 120	
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His Ala Gly Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly	
125 130 135	
gtg att gcc ccg ggc acc ccc agc cag aac acg cag tgc cag ccg tgc	483
Val Ile Ala Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys	
140 145 150	
ccc cca ggc acc ttc tca gcc agc agc tcc agc tca gag cag tgc cag	531
Pro Pro Gly Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln	
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Pro His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly	
170 175 180 185	
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Ser Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu	
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Ser Thr Arg Val Pro Gly Ala Glu Gly Cys Glu Arg Ala Val Ile Asp	
205 210 215	
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Phe Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu	
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 Gln Ala Leu Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly
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cgc gcg gcc ttg cag ctg aag ctg cgt cgg cgg ctc acg gag ctc ctg 819
 Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu
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ggg gcg cag gac ggg gcg ctg ctg gtg cgg ctg ctg cag gcg ctg cgc 867
 Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg
 270 275 280

gtg gcc agg atg ccc ggg ctg gag cgg agc gtc cgt gag cgc ttc ctc 915
 Val Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu
 285 290 295

cct gtg cac tgatcctggc cccctcttat ttattctaca tccttggcac 964
 Pro Val His
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Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
 35 40 45

Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
 50 55 60

Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
 65 70 75 80

Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
 85 90 95

Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
 100 105 110

Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
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      Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys
            1                      5                      10

ctg gtg ttg gcg ctg cct gcc ctg ctg ccg gtg ccg gct gta cgc gga 159
Leu Val Leu Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly
      15                      20                      25

gtg gca gaa aca ccc acc tac ccc tgg cgg gac gca gag aca ggg gag 207
Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
      30                      35                      40                      45

cgg ctg gtg tgc gcc cag tgc ccc cca ggc acc ttt gtg cag cgg ccg 255
Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
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 Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
 35 40 45
 Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
 50 55 60
 Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
 65 70 75 80
 Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
 85 90 95
 Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
 100 105 110
 Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
 115 120 125
 His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Glu Ser
 130 135 140
 Trp Ala Arg Gly Gly Ala Pro Arg Ser Gly Gly Arg Arg Cys Gly Arg
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 Gly Gln Val Ala Gly Pro Ser Leu Ala Pro
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 20 25 30
 His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys
 35 40 45

005225660

Tyr	Ile	His	Pro	Gln	Asn	Asn	Ser	Ile	Cys	Cys	Thr	Lys	Cys	His	Lys
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65					70					75					80
Cys	Arg	Glu	Cys	Glu	Ser	Gly	Ser	Phe	Thr	Ala	Ser	Glu	Asn	His	Leu
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Arg	His	Cys	Leu	Ser	Cys	Ser	Lys	Cys	Arg	Lys	Glu	Met	Gly	Gln	Val
			100					105					110		
Glu	Ile	Ser	Ser	Cys	Thr	Val	Asp	Arg	Asp	Thr	Val	Cys	Gly	Cys	Arg
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Lys	Asn	Gln	Tyr	Arg	His	Tyr	Trp	Ser	Glu	Asn	Leu	Phe	Gln	Cys	Phe
	130					135					140				
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145					150					155					160
Lys	Gln	Asn	Thr	Val	Cys	Thr	Cys	His	Ala	Gly	Phe	Phe	Leu	Arg	Glu
				165					170					175	
Asn	Glu	Cys	Val	Ser	Cys	Ser	Asn	Cys	Lys	Lys	Ser	Leu	Glu	Cys	Thr
			180					185					190		
Lys	Leu	Cys	Leu	Pro	Gln	Ile	Glu	Asn	Val	Lys	Gly	Thr	Glu	Asp	Ser
		195					200					205			
Gly	Thr	Thr	Val	Leu	Leu	Pro	Leu	Val	Ile	Phe	Phe	Gly	Leu	Cys	Leu
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225					230					235					240
Ser	Lys	Leu	Tyr	Ser	Ile	Val	Cys	Gly	Lys	Ser	Thr	Pro	Glu	Lys	Glu
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Gly	Glu	Leu	Glu	Gly	Thr	Thr	Thr	Lys	Pro	Leu	Ala	Pro	Asn	Pro	Ser
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Phe	Ser	Pro	Thr	Pro	Gly	Phe	Thr	Pro	Thr	Leu	Gly	Phe	Ser	Pro	Val
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Ala	Asp	Pro	Ile	Leu	Ala	Thr	Ala	Leu	Ala	Ser	Asp	Pro	Ile	Pro	Asn
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Pro	Leu	Gln	Lys	Trp	Glu	Asp	Ser	Ala	His	Lys	Pro	Gln	Ser	Leu	Asp
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Thr	Asp	Asp	Pro	Ala	Thr	Leu	Tyr	Ala	Val	Val	Glu	Asn	Val	Pro	Pro
		355					360					365			

Leu Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu Ser Asp His Glu
370 375 380

Ile Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln
385 390 395 400

Tyr Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala
405 410 415

Thr Leu Glu Leu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly
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Pro Ala Pro Ser Leu Leu Arg
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<210> 6

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<212> PRT

<213> Homo sapiens

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Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln
35 40 45

Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys
50 55 60

Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp
65 70 75 80

Ser Thr Tyr Thr Gln Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys
85 90 95

Gly Ser Arg Cys Ser Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg
100 105 110

Glu Gln Asn Arg Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu
115 120 125

Ser Lys Gln Glu Gly Cys Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg
130 135 140

Pro Gly Phe Gly Val Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val
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Cys Lys Pro Cys Ala Pro Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr
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Asp Ile Cys Arg Pro His Gln Ile Cys Asn Val Val Ala Ile Pro Gly
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Asn Ala Ser Arg Asp Ala Val Cys Thr Ser Thr Ser Pro Thr Arg Ser
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Met Ala Pro Gly Ala Val His Leu Pro Gln Pro Val Ser Thr Arg Ser
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Gln His Thr Gln Pro Thr Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser
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Phe Leu Leu Pro Met Gly Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly
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Asp Phe Ala Leu Pro Val Gly Leu Ile Val Gly Val Thr Ala Leu Gly
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Leu Leu Ile Ile Gly Val Val Asn Cys Val Ile Met Thr Gln Val Lys
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Lys Lys Pro Leu Cys Leu Gln Arg Glu Ala Lys Val Pro His Leu Pro
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Ala Asp Lys Ala Arg Gly Thr Gln Gly Pro Glu Gln Gln His Leu Leu
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Ile Thr Ala Pro Ser Ser Ser Ser Ser Ser Leu Glu Ser Ser Ala Ser
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Ala Leu Asp Arg Arg Ala Pro Thr Arg Asn Gln Pro Gln Ala Pro Gly
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Val Glu Ala Ser Gly Ala Gly Glu Ala Arg Ala Ser Thr Gly Ser Ser
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Asp Ser Ser Pro Gly Gly His Gly Thr Gln Val Asn Val Thr Cys Ile
 370                                375                                380

Val Asn Val Cys Ser Ser Ser Asp His Ser Ser Gln Cys Ser Ser Gln
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Ala Ser Ser Thr Met Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro
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Lys Asp Glu Gln Val Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser
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Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro
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<212> PRT

<213> Homo sapiens

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Pro	Thr	Gly	Leu	Tyr	Thr	His	Ser	Gly	Glu	Cys	Cys	Lys	Ala	Cys	Asn				
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Glu	Pro	Cys	Leu	Asp	Ser	Val	Thr	Phe	Ser	Asp	Val	Val	Ser	Ala	Thr				
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Glu	Pro	Cys	Lys	Pro	Cys	Thr	Glu	Cys	Val	Gly	Leu	Gln	Ser	Met	Ser				
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Ala	Pro	Cys	Val	Glu	Ala	Asp	Asp	Ala	Val	Cys	Arg	Cys	Ala	Tyr	Gly				
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Tyr	Tyr	Gln	Asp	Glu	Thr	Thr	Gly	Arg	Cys	Glu	Ala	Cys	Arg	Val	Cys				
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Glu	Ala	Gly	Ser	Gly	Leu	Val	Phe	Ser	Cys	Gln	Asp	Lys	Gln	Asn	Thr				
		130					135					140							
Val	Cys	Glu	Glu	Cys	Pro	Asp	Gly	Thr	Tyr	Ser	Asp	Glu	Ala	Asn	His				
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Val	Asp	Pro	Cys	Leu	Pro	Cys	Thr	Val	Cys	Glu	Asp	Thr	Glu	Arg	Gln				
		165					170					175							
Leu	Arg	Glu	Cys	Thr	Arg	Trp	Ala	Asp	Ala	Glu	Cys	Glu	Glu	Ile	Pro				
		180					185					190							
Gly	Arg	Trp	Ile	Thr	Arg	Ser	Thr	Pro	Pro	Glu	Gly	Ser	Asp	Ser	Thr				
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Ala	Pro	Ser	Thr	Gln	Glu	Pro	Glu	Ala	Pro	Pro	Glu	Gln	Asp	Leu	Ile				
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Ala	Ser	Thr	Val	Ala	Gly	Val	Val	Thr	Thr	Val	Met	Gly	Ser	Ser	Gln				
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Pro	Val	Val	Thr	Arg	Gly	Thr	Thr	Asp	Asn	Leu	Ile	Pro	Val	Tyr	Cys				
		245					250					255							
Ser	Ile	Leu	Ala	Ala	Val	Val	Val	Gly	Leu	Val	Ala	Tyr	Ile	Ala	Phe				
		260					265					270							
Lys	Arg	Trp	Asn	Ser	Cys	Lys	Gln	Asn	Lys	Gln	Gly	Ala	Asn	Ser	Arg				
		275					280					285							
Pro	Val	Asn	Gln	Thr	Pro	Pro	Pro	Glu	Gly	Glu	Lys	Leu	His	Ser	Asp				
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Ser	Gly	Ile	Ser	Val	Asp	Ser	Gln	Ser	Leu	His	Asp	Gln	Gln	Pro	His				
		305					310					315							
Thr	Gln	Thr	Ala	Ser	Gly	Gln	Ala	Leu	Lys	Gly	Asp	Gly	Gly	Leu	Tyr				

Thr Gln Thr Ala Ser Gly Gln Ala Leu Lys Gly Asp Gly Gly Leu Tyr

11

325

330

335

Ser Ser Leu Pro Pro Ala Lys Arg Glu Glu Val Glu Lys Leu Leu Asn
340 345 350

Gly Ser Ala Gly Asp Thr Trp Arg His Leu Ala Gly Glu Leu Gly Tyr
355 360 365

Gln Pro Glu His Ile Asp Ser Phe Thr His Glu Ala Cys Pro Val Arg
370 375 380

Ala Leu Leu Ala Ser Trp Ala Thr Gln Asp Ser Ala Thr Leu Asp Ala
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<213> Homo sapiens

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35 40 45

Glu Tyr Tyr Glu Pro Met His Asp Val Cys Cys Ser Arg Cys Pro Pro
50 55 60

Gly Glu Phe Val Phe Ala Val Cys Ser Arg Ser Gln Asp Thr Val Cys
65 70 75 80

Lys Thr Cys Pro His Asn Ser Tyr Asn Glu His Trp Asn His Leu Ser
85 90 95

Thr Cys Gln Leu Cys Arg Pro Cys Asp Ile Val Leu Gly Phe Glu Glu
100 105 110

Val Ala Pro Cys Thr Ser Asp Arg Lys Ala Glu Cys Arg Cys Gln Pro
115 120 125

Gly Met Ser Cys Val Tyr Leu Asp Asn Glu Cys Val His Cys Glu Glu
130 135 140

Glu Arg Leu Val Leu Cys Gln Pro Gly Thr Glu Ala Glu Val Thr Asp
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Glu Ile Met Asp Thr Asp Val Asn Cys Val Pro Cys Lys Pro Gly His
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"04230" 56560

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Lys Gly Leu Glu Leu Arg Lys Thr Val Thr Thr Val Glu Thr Gln Asn
      35             40             45

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Leu Glu Gly Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro
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 Pro Gly Glu Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro
 65 70 75 80
 Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His
 85 90 95
 Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly
 100 105 110
 Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg
 115 120 125
 Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp
 130 135 140
 Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr
 145 150 155 160
 Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn Leu Gly Trp
 165 170 175
 Leu Cys Leu Leu Leu Leu Pro Ile Pro Leu Ile Val Trp Val Lys Arg
 180 185 190
 Lys Glu Val Gln Lys Thr Cys Arg Lys His Arg Lys Glu Asn Gln Gly
 195 200 205
 Ser His Glu Ser Pro Thr Leu Asn Pro Glu Thr Val Ala Ile Asn Leu
 210 215 220
 Ser Asp Val Asp Leu Ser Lys Tyr Ile Thr Thr Ile Ala Gly Val Met
 225 230 235 240
 Thr Leu Ser Gln Val Lys Gly Phe Val Arg Lys Asn Gly Val Asn Glu
 245 250 255
 Ala Lys Ile Asp Glu Ile Lys Asn Asp Asn Val Gln Asp Thr Ala Glu
 260 265 270
 Gln Lys Val Gln Leu Leu Arg Asn Trp His Gln Leu His Gly Lys Lys
 275 280 285
 Glu Ala Tyr Asp Thr Leu Ile Lys Asp Leu Lys Lys Ala Asn Leu Cys
 290 295 300
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 305 310 315 320
 Asp Ser Glu Asn Ser Asn Phe Arg Asn Glu Ile Gln Ser Leu Val
 325 330 335

<210> 10
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 <213> Homo sapiens

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Met Ala Arg Pro His Pro Trp Trp Leu Cys Val Leu Gly Thr Leu Val
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Gly Leu Ser Ala Thr Pro Ala Pro Lys Ser Cys Pro Glu Arg His Tyr
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Trp Ala Gln Gly Lys Leu Cys Cys Gln Met Cys Glu Pro Gly Thr Phe
 35 40 45

Leu Val Lys Asp Cys Asp Gln His Arg Lys Ala Ala Gln Cys Asp Pro
 50 55 60

Cys Ile Pro Gly Val Ser Phe Ser Pro Asp His His Thr Arg Pro His
 65 70 75 80

Cys Glu Ser Cys Arg His Cys Asn Ser Gly Leu Leu Val Arg Asn Cys
 85 90 95

Thr Ile Thr Ala Asn Ala Glu Cys Ala Cys Arg Asn Gly Trp Gln Cys
 100 105 110

Arg Asp Lys Glu Cys Thr Glu Cys Asp Pro Leu Pro Asn Pro Ser Leu
 115 120 125

Thr Ala Arg Ser Ser Gln Ala Leu Ser Pro His Pro Gln Pro Thr His
 130 135 140

Leu Pro Tyr Val Ser Glu Met Leu Glu Ala Arg Thr Ala Gly His Met
 145 150 155 160

Gln Thr Leu Ala Asp Phe Arg Gln Leu Pro Ala Arg Thr Leu Ser Thr
 165 170 175

His Trp Pro Pro Gln Arg Ser Leu Cys Ser Ser Asp Phe Ile Arg Ile
 180 185 190

Leu Val Ile Phe Ser Gly Met Phe Leu Val Phe Thr Leu Ala Gly Ala
 195 200 205

Leu Phe Leu His Gln Arg Arg Lys Tyr Arg Ser Asn Lys Gly Glu Ser
 210 215 220

Pro Val Glu Pro Ala Glu Pro Cys Arg Tyr Ser Cys Pro Arg Glu Glu
 225 230 235 240

Glu Gly Ser Thr Ile Pro Ile Gln Glu Asp Tyr Arg Lys Pro Glu Pro
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Ala Cys Ser Pro
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<400> 11

104280 226550

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20 25 30

Pro Ser His Tyr Tyr Asp Lys Ala Val Arg Arg Cys Cys Tyr Arg Cys
35 40 45

Pro Met Gly Leu Phe Pro Thr Gln Gln Cys Pro Gln Arg Pro Thr Asp
50 55 60

Cys Arg Lys Gln Cys Glu Pro Asp Tyr Tyr Leu Asp Glu Ala Asp Arg
65 70 75 80

Cys Thr Ala Cys Val Thr Cys Ser Arg Asp Asp Leu Val Glu Lys Thr
85 90 95

Pro Cys Ala Trp Asn Ser Ser Arg Val Cys Glu Cys Arg Pro Gly Met
100 105 110

Phe Cys Ser Thr Ser Ala Val Asn Ser Cys Ala Arg Cys Phe Phe His
115 120 125

Ser Val Cys Pro Ala Gly Met Ile Val Lys Phe Pro Gly Thr Ala Gln
130 135 140

Lys Asn Thr Val Cys Glu Pro Ala Ser Pro Gly Val Ser Pro Ala Cys
145 150 155 160

Ala Ser Pro Glu Asn Cys Lys Glu Pro Ser Ser Gly Thr Ile Pro Gln
165 170 175

Ala Lys Pro Thr Pro Val Ser Pro Ala Thr Ser Ser Ala Ser Thr Met
180 185 190

Pro Val Arg Gly Gly Thr Arg Leu Ala Gln Glu Ala Ala Ser Lys Leu
195 200 205

Thr Arg Ala Pro Asp Ser Pro Ser Ser Val Gly Arg Pro Ser Ser Asp
210 215 220

Pro Gly Leu Ser Pro Thr Gln Pro Cys Pro Glu Gly Ser Gly Asp Cys
225 230 235 240

Arg Lys Gln Cys Glu Pro Asp Tyr Tyr Leu Asp Glu Ala Gly Arg Cys
245 250 255

Thr Ala Cys Val Ser Cys Ser Arg Asp Asp Leu Val Glu Lys Thr Pro
260 265 270

Cys Ala Trp Asn Ser Ser Arg Thr Cys Glu Cys Arg Pro Gly Met Ile
275 280 285

Cys Ala Thr Ser Ala Thr Asn Ser Cys Ala Arg Cys Val Pro Tyr Pro
290 295 300

Ile Cys Ala Ala Glu Thr Val Thr Lys Pro Gln Asp Met Ala Glu Lys
305 310 315 320

104330 26660

Asp Thr Thr Phe Glu Ala Pro Pro Leu Gly Thr Gln Pro Asp Cys Asn
 325 330 335
 Pro Thr Pro Glu Asn Gly Glu Ala Pro Ala Ser Thr Ser Pro Thr Gln
 340 345 350
 Ser Leu Leu Val Asp Ser Gln Ala Ser Lys Thr Leu Pro Ile Pro Thr
 355 360 365
 Ser Ala Pro Val Ala Leu Ser Ser Thr Gly Lys Pro Val Leu Asp Ala
 370 375 380
 Gly Pro Val Leu Phe Trp Val Ile Leu Val Leu Val Val Val Gly
 385 390 395 400
 Ser Ser Ala Phe Leu Leu Cys His Arg Arg Ala Cys Arg Lys Arg Ile
 405 410 415
 Arg Gln Lys Leu His Leu Cys Tyr Pro Val Gln Thr Ser Gln Pro Lys
 420 425 430
 Leu Glu Leu Val Asp Ser Arg Pro Arg Arg Ser Ser Thr Gln Leu Arg
 435 440 445
 Ser Gly Ala Ser Val Thr Glu Pro Val Ala Glu Glu Arg Gly Leu Met
 450 455 460
 Ser Gln Pro Leu Met Glu Thr Cys His Ser Val Gly Ala Ala Tyr Leu
 465 470 475 480
 Glu Ser Leu Pro Leu Gln Asp Ala Ser Pro Ala Gly Gly Pro Ser Ser
 485 490 495
 Pro Arg Asp Leu Pro Glu Pro Arg Val Ser Thr Glu His Thr Asn Asn
 500 505 510
 Lys Ile Glu Lys Ile Tyr Ile Met Lys Ala Asp Thr Val Ile Val Gly
 515 520 525
 Thr Val Lys Ala Glu Leu Pro Glu Gly Arg Gly Leu Ala Gly Pro Ala
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 Glu Pro Glu Leu Glu Glu Glu Leu Glu Ala Asp His Thr Pro His Tyr
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 Pro Glu Gln Glu Thr Glu Pro Pro Leu Gly Ser Cys Ser Asp Val Met
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 Leu Ser Val Glu Glu Glu Gly Lys Glu Asp Pro Leu Pro Thr Ala Ala
 580 585 590
 Ser Gly Lys
 595

<210> 12
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 12

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 1 5 10 15

Ala Val His Pro Glu Pro Pro Thr Ala Cys Arg Glu Lys Gln Tyr Leu
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Ile Asn Ser Gln Cys Cys Ser Leu Cys Gln Pro Gly Gln Lys Leu Val
 35 40 45

Ser Asp Cys Thr Glu Phe Thr Glu Thr Glu Cys Leu Pro Cys Gly Glu
 50 55 60

Ser Glu Phe Leu Asp Thr Trp Asn Arg Glu Thr His Cys His Gln His
 65 70 75 80

Lys Tyr Cys Asp Pro Asn Leu Gly Leu Arg Val Gln Gln Lys Gly Thr
 85 90 95

Ser Glu Thr Asp Thr Ile Cys Thr Cys Glu Glu Gly Trp His Cys Thr
 100 105 110

Ser Glu Ala Cys Glu Ser Cys Val Leu His Arg Ser Cys Ser Pro Gly
 115 120 125

Phe Gly Val Lys Gln Ile Ala Thr Gly Val Ser Asp Thr Ile Cys Glu
 130 135 140

Pro Cys Pro Val Gly Phe Phe Ser Asn Val Ser Ser Ala Phe Glu Lys
 145 150 155 160

Cys His Pro Trp Thr Ser Cys Glu Thr Lys Asp Leu Val Val Gln Gln
 165 170 175

Ala Gly Thr Asn Lys Thr Asp Val Val Cys Gly Pro Gln Asp Arg Leu
 180 185 190

Arg Ala Leu Val Val Ile Pro Ile Ile Phe Gly Ile Leu Phe Ala Ile
 195 200 205

Leu Leu Val Leu Val Phe Ile Lys Lys Val Ala Lys Lys Pro Thr Asn
 210 215 220

Lys Ala Pro His Pro Lys Gln Glu Pro Gln Glu Ile Asn Phe Pro Asp
 225 230 235 240

Asp Leu Pro Gly Ser Asn Thr Ala Ala Pro Val Gln Glu Thr Leu His
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Gly Cys Gln Pro Val Thr Gln Glu Asp Gly Lys Glu Ser Arg Ile Ser
 260 265 270

Val Gln Glu Arg Gln
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<210> 13

<211> 255

<212> PRT

<213> Homo sapiens

104280 225660

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Ala	Gly	Thr 35	Phe	Cys	Asp	Asn	Asn 40	Arg	Asn	Gln	Ile	Cys 45	Ser	Pro	Cys
Pro	Pro 50	Asn	Ser	Phe	Ser	Ser 55	Ala	Gly	Gly	Gln	Arg 60	Thr	Cys	Asp	Ile
Cys 65	Arg	Gln	Cys	Lys	Gly 70	Val	Phe	Arg	Thr	Arg 75	Lys	Glu	Cys	Ser	Ser 80
Thr	Ser	Asn	Ala	Glu 85	Cys	Asp	Cys	Thr	Pro 90	Gly	Phe	His	Cys	Leu 95	Gly
Ala	Gly	Cys	Ser 100	Met	Cys	Glu	Gln	Asp 105	Cys	Lys	Gln	Gly	Gln 110	Glu	Leu
Thr	Lys	Lys 115	Gly	Cys	Lys	Asp	Cys 120	Cys	Phe	Gly	Thr	Phe 125	Asn	Asp	Gln
Lys 130	Arg	Gly	Ile	Cys	Arg	Pro 135	Trp	Thr	Asn	Cys	Ser 140	Leu	Asp	Gly	Lys
Ser 145	Val	Leu	Val	Asn	Gly 150	Thr	Lys	Glu	Arg 155	Asp	Val	Val	Cys	Gly	Pro 160
Ser	Pro	Ala	Asp 165	Leu	Ser	Pro	Gly	Ala	Ser 170	Ser	Val	Thr	Pro	Pro 175	Ala
Pro	Ala	Arg	Glu 180	Pro	Gly	His	Ser	Pro 185	Gln	Ile	Ile	Ser	Phe 190	Phe	Leu
Ala	Leu	Thr 195	Ser	Thr	Ala	Leu	Leu 200	Phe	Leu	Leu	Phe	Phe 205	Leu	Thr	Leu
Arg	Phe 210	Ser	Val	Val	Lys	Arg 215	Gly	Arg	Lys	Lys	Leu 220	Leu	Tyr	Ile	Phe
Lys 225	Gln	Pro	Phe	Met	Arg 230	Pro	Val	Gln	Thr	Thr 235	Gln	Glu	Glu	Asp	Gly 240
Cys	Ser	Cys	Arg 245	Phe	Pro	Glu	Glu	Glu	Glu 250	Gly	Gly	Cys	Glu	Leu 255	

<400> 14
Met Cys Val Gly Ala Arg Arg Leu Gly Arg Gly Pro Cys Ala Ala Leu
1 5 10 15

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<210> 15
<211> 349
<212> PRT
<213> Homo sapiens

<400> 15
Met Lys Ser Val Leu Tyr Leu Tyr Ile Leu Phe Leu Ser Cys Ile Ile
  1           5           10           15
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Lys	Asp	Thr	Glu	Tyr	Lys	Arg	His	Asn	Leu	Cys	Cys	Leu	Ser	Cys	Pro
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Pro	Gly	Thr	Tyr	Ala	Ser	Arg	Leu	Cys	Asp	Ser	Lys	Thr	Asn	Thr	Gln
		50				55					60				
Cys	Thr	Pro	Cys	Gly	Ser	Gly	Thr	Phe	Thr	Ser	Arg	Asn	Asn	His	Leu
					70					75					80
Pro	Ala	Cys	Leu	Ser	Cys	Asn	Gly	Arg	Cys	Asn	Ser	Asn	Gln	Val	Glu
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Thr	Arg	Ser	Cys	Asn	Thr	Thr	His	Asn	Arg	Ile	Cys	Glu	Cys	Ser	Pro
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Gly	Tyr	Tyr	Cys	Leu	Leu	Lys	Gly	Ser	Ser	Gly	Cys	Lys	Ala	Cys	Val
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Ser	Gln	Thr	Lys	Cys	Gly	Ile	Gly	Tyr	Gly	Val	Ser	Gly	His	Thr	Ser
		130				135					140				
Val	Gly	Asp	Val	Ile	Cys	Ser	Pro	Cys	Gly	Phe	Gly	Thr	Tyr	Ser	His
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Thr	Val	Ser	Ser	Ala	Asp	Lys	Cys	Glu	Pro	Val	Pro	Asn	Asn	Thr	Phe
				165					170					175	
Asn	Tyr	Ile	Asp	Val	Glu	Ile	Thr	Leu	Tyr	Pro	Val	Asn	Asp	Thr	Ser
			180					185					190		
Cys	Thr	Arg	Thr	Thr	Thr	Thr	Gly	Leu	Ser	Glu	Ser	Ile	Leu	Thr	Ser
		195					200					205			
Glu	Leu	Thr	Ile	Thr	Met	Asn	His	Thr	Asp	Cys	Asn	Pro	Val	Phe	Arg
		210				215					220				
Glu	Glu	Tyr	Phe	Ser	Val	Leu	Asn	Lys	Val	Ala	Thr	Ser	Gly	Phe	Phe
					230					235					240
Thr	Gly	Glu	Asn	Arg	Tyr	Gln	Asn	Ile	Ser	Lys	Val	Cys	Thr	Leu	Asn
				245					250					255	
Phe	Glu	Ile	Lys	Cys	Asn	Asn	Lys	Gly	Ser	Ser	Phe	Lys	Gln	Leu	Thr
			260					265					270		
Lys	Ala	Lys	Asn	Asp	Asp	Gly	Met	Met	Ser	His	Ser	Glu	Thr	Val	Thr
		275					280					285			
Leu	Ala	Gly	Asp	Cys	Leu	Ser	Ser	Val	Asp	Ile	Tyr	Ile	Leu	Tyr	Ser
						295					300				
Asn	Thr	Asn	Ala	Gln	Asp	Tyr	Glu	Thr	Asp	Thr	Ile	Ser	Tyr	Arg	Val
					310					315					320
Gly	Asn	Val	Leu	Asp	Asp	Asp	Ser	His	Met	Pro	Gly	Ser	Cys	Asn	Ile
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His Lys Pro Ile Thr Asn Ser Lys Pro Thr Arg Phe Leu
 340 345

<210> 16
 <211> 355
 <212> PRT
 <213> Homo sapiens

<400> 16
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 Asn Glu Tyr Lys Arg His His Leu Cys Cys Leu Ser Cys Pro Pro Gly
 35 40 45
 Thr Tyr Ala Ser Arg Leu Cys Asp Ser Lys Thr Asn Thr Asn Thr Gln
 50 55 60
 Cys Thr Pro Cys Ala Ser Asp Thr Phe Thr Ser Arg Asn Asn His Leu
 65 70 75 80
 Pro Ala Cys Leu Ser Cys Asn Gly Arg Cys Asp Ser Asn Gln Val Glu
 85 90 95
 Thr Arg Ser Cys Asn Thr Thr His Asn Arg Ile Cys Asp Cys Ala Pro
 100 105 110
 Gly Tyr Tyr Cys Phe Leu Lys Gly Ser Ser Gly Cys Lys Ala Cys Val
 115 120 125
 Ser Gln Thr Lys Cys Gly Ile Gly Tyr Gly Val Ser Gly His Thr Pro
 130 135 140
 Thr Gly Asp Val Val Cys Ser Pro Cys Gly Leu Gly Thr Tyr Ser His
 145 150 155 160
 Thr Val Ser Ser Val Asp Lys Cys Glu Pro Val Pro Ser Asn Thr Phe
 165 170 175
 Asn Tyr Ile Asp Val Glu Ile Asn Leu Tyr Pro Val Asn Asp Thr Ser
 180 185 190
 Cys Thr Arg Thr Thr Thr Thr Gly Leu Ser Glu Ser Ile Ser Thr Ser
 195 200 205
 Glu Leu Thr Ile Thr Met Asn His Lys Asp Cys Asp Pro Val Phe Arg
 210 215 220
 Asn Gly Tyr Phe Ser Val Leu Asn Glu Val Ala Thr Ser Gly Phe Phe
 225 230 235 240
 Thr Gly Gln Asn Arg Tyr Gln Asn Ile Ser Lys Val Cys Thr Leu Asn
 245 250 255
 Phe Glu Ile Lys Cys Asn Asn Lys Asp Ser Tyr Ser Ser Ser Lys Gln

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<210> 17
<211> 499
<212> DNA
<213> Homo sapiens

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<220>
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<222> (41)
<223> n equals a, t, g, or c

<220>
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<222> (181)
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 <222> (474)
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<220>
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 <222> (482)..(484)
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<220>
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 <222> (496)
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 tgctgccggt gccggctgta cgcggagtgg cagaaacacn nacntacccc tggcgggacg 180
 nagagacagg ggagcggctg gtgtntnccc antgcccccc aggcaccttt ntgcagcggc 240
 cgtgccgncg agacagcccc acgacgtgtg gcccgtnntcc accgcgccac tacacgcatt 300
 ctggaactac ctggagcgct gncgttactn caacgtcctc tgcgggggagc gtnaggagga 360
 ggcacggggt tncacgnca accacaaccg nggnttaccg tngccgnacc ggtttcttcg 420
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tnnnncnctggg aaactnaaa

499

<210> 18
 <211> 191
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (42)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (106)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (125)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (188)
 <223> n equals a, t, g, or c

<400> 18
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 ctgtgcacca gctgcactgg cttccccctc agcaccaggg taccangagc tgaggagtgt 120
 gagcntgccg tcatcgactt tttggctttc caggacatct ccatcaagag gctgcagcgg 180
 ctgctcangc c 191

<210> 19
 <211> 26
 <212> DNA
 <213> Artificial sequence

<220>
 <223> TNFR-6 alpha forward primer containing Nco I restriction site

<400> 19
 cgcccatggc agaaacaccc acctac 26

<210> 20
 <211> 26
 <212> DNA
 <213> Artificial sequence

<220>
 <223> TNFR-6 alpha reverse primer containing Hind III restriction site

<400> 20
 cgcaagcttc tctttcagtg caagtg 26

<210> 21

<211> 28
 <212> DNA
 <213> Artificial sequence

<220>

<223> TNFR-6 beta reverse primer containing Hind III restriction site

<400> 21
 cgcaagcttc tcctcagctc ctgcagtg

28

<210> 22
 <211> 36
 <212> DNA
 <213> Artificial sequence

<220>

<223> TNFR-6 alpha and TNFR-6 beta forward primer containing Bam HI restriction site

<400> 22
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36

<210> 23
 <211> 26
 <212> DNA
 <213> Artificial sequence

<220>

<223> TNFR-6 alpha reverse primer containing Asp 718 restriction site

<400> 23
 cgcggtaccc tctttcagtg caagtg

26

<210> 24
 <211> 28
 <212> DNA
 <213> Artificial sequence

<220>

<223> TNFR-6 beta reverse primer containing Asp 718 restriction site

<400> 24
 cgcggtaccc tcctcagctc ctgcagtg

28

<210> 25
 <211> 33
 <212> DNA
 <213> Artificial sequence

<220>

<223> TNFR-6 alpha forward primer

<400> 25
 agacccaagc ttcctgctcc agcaaggacc atg

33

<210> 26
 <211> 50
 <212> DNA
 <213> Artificial sequence

<220>
 <223> TNFR-6 alpha reverse primer

<400> 26
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<210> 27
 <211> 733
 <212> DNA
 <213> Homo sapiens

<400> 27
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<210> 28
 <211> 1796
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> 425-560

<220>
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 <222> 756-1512

<400> 28
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 ccgggtgaga gctgggagcag gggaggggcc cccaggagtg gtggccggag gtgtggcagg 480
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 ctgactggc ttccccctca gcaccagggt accaggtgag ccagaggcct gagggggcag 780
 cacactgcag gccaggccca cttgtgccct cactcctgcc cctgcacgtg catctagcct 840

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<210> 29
<211> 17
<212> PRT
<213> Homo Sapiens

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<220>
<221> SIGNAL
<222> (1)..(22)
<223> stanniocalcin signal sequence

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<400> 29
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Ala

```

<210> 30
<211> 22
<212> PRT
<213> Artificial Sequence

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<220>
<221> SIGNAL
<222> (1)..(22)
<223> consensus signal sequence

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<400> 30
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  1               5               10               15

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Trp Ala Pro Ala Arg Gly
          20

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<210> 31
<211> 283
<212> PRT
<213> Homo sapiens

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<400> 31
Met Glu Pro Pro Gly Asp Trp Gly Pro Pro Pro Trp Arg Ser Thr Pro
  1               5               10               15

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<210> 32
<211> 903
<212> DNA
<213> Artificial Sequence

<220>
<223> Mammalian synthetic TNFR-6 alpha

<400> 32
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ccttgtaggc gcgattctcc tacgacgtgt ggcccttgcc ctctaggca ctatacacag 240
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903

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<210> 33

<211> 1550

<212> DNA

<213> Artificial Sequence

<220>

<223> Codon optimized TNFR-6 alpha

<400> 33

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